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Fig. 2a

gctctccctg	ctccagcaag	gacc	atg	agg	gcg	ctg	gag	ggg	cca	ggc	ctg	51				
			Met	Arg	Ala	Leu	Glu	Gly	Pro	Gly	Leu					
			1				5									
tcg	ctg	ctg	tgc	ctg	gtg	ttg	gcg	ctg	cct	gcc	ctg	ctg	ccg	gtg	ccg	99
Ser	Leu	Leu	Cys	Leu	Val	Leu	Ala	Leu	Pro	Ala	Leu	Leu	Pro	Val	Pro	
10					15				20						25	
gct	gta	cgc	gga	gtg	gca	gaa	aca	ccc	acc	tac	ccc	tgg	cgg	gac	gca	147
Ala	Val	Arg	Gly	Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	
				30				35						40		
gag	aca	ggg	gag	cgg	ctg	gtg	tgc	gcc	cag	tgc	ccc	cca	ggc	acc	ttt	195
Glu	Thr	Gly	Glu	Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	
			45					50					55			
gtg	cag	cgg	ccg	tgc	cgc	cga	gac	agc	ccc	acg	acg	tgt	ggc	ccg	tgt	243
Val	Gln	Arg	Pro	Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	
			60				65					70				
cca	ccg	cgc	cac	tac	acg	cag	ttc	tgg	aac	tac	ctg	gag	cgc	tgc	cgc	291
Pro	Pro	Arg	His	Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	
			75			80					85					
tac	tgc	aac	gtc	ctc	tgc	ggg	gag	cgt	gag	gag	gag	gca	cgg	gct	tgc	339
Tyr	Cys	Asn	Val	Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	
					95				100						105	
cac	gcc	acc	cac	aac	cgt	gcc	tgc	cgc	tgc	cgc	acc	ggc	ttc	ttc	gcc	387
His	Ala	Thr	His	Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	
				110					115					120		
cac	gct	ggt	ttc	tgc	ttg	gag	cac	gca	tgc	tgt	cca	cct	ggt	gcc	ggc	435
His	Ala	Gly	Phe	Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	
			125					130					135			
gtg	att	gcc	ccg	ggc	acc	ccc	agc	cag	aac	acg	cag	tgc	cag	ccg	tgc	483
Val	Ile	Ala	Pro	Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	
			140				145					150				
ccc	cca	ggc	acc	ttc	tca	gcc	agc	agc	tcc	agc	tca	gag	cag	tgc	cag	531
Pro	Pro	Gly	Thr	Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	
			155			160					165					
ccc	cac	cgc	aac	tgc	acg	gcc	ctg	ggc	ctg	gcc	ctc	att	gtg	cca	ggc	579
Pro	His	Arg	Asn	Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Ile	Val	Pro	Gly	
					175				180						185	
tct	tcc	tcc	cat	gac	acc	ctg	tgc	acc	agc	tgc	act	ggc	ttc	ccc	ctc	627
Ser	Ser	Ser	His	Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	
				190					195					200		
agc	acc	agg	gta	cca	gga	gct	gag	gag	tgt	gag	cgt	gcc	gtc	atc	gac	675
Ser	Thr	Arg	Val	Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	
			205				210						215			
ttt	gtg	gct	ttc	cag	gac	atc	tcc	atc	aag	agg	ctg	cag	cgg	ctg	ctg	723
Phe	Val	Ala	Phe	Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	
			220				225					230				



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Fig. 2b

cag gcc ctc gag gcc ccg gag ggc tgg gct ccg aca cca agg gcg ggc	771
Gln Ala Leu Glu Ala Pro Glu Gly Trp Ala Pro Thr Pro Arg Ala Gly	
235 240 245	
cgc gcg gcc ttg cag ctg aag ctg cgt cgg cgg ctc acg gag ctc ctg	819
Arg Ala Ala Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu	
250 255 260 265	
ggg gcg cag gac ggg gcg ctg ctg gtg cgg ctg ctg cag gcg ctg cgc	867
Gly Ala Gln Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg	
270 275 280	
gtg gcc agg atg ccc ggg ctg gag cgg agc gtc cgt gag cgc ttc ctc	915
Val Ala Arg Met Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu	
285 290 295	
cct gtg cac tgatcctggc cc	936
Pro Val His	
300	



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Fig. 4a

gtg	gca	gaa	aca	ccc	acc	tac	ccc	tgg	cgg	gac	gca	gag	aca	ggg	gag	48
Val	Ala	Glu	Thr	Pro	Thr	Tyr	Pro	Trp	Arg	Asp	Ala	Glu	Thr	Gly	Glu	
1				5					10					15		
cgg	ctg	gtg	tgc	gcc	cag	tgc	ccc	cca	ggc	acc	ttt	gtg	cag	cgg	ccg	96
Arg	Leu	Val	Cys	Ala	Gln	Cys	Pro	Pro	Gly	Thr	Phe	Val	Gln	Arg	Pro	
			20					25					30			
tgc	cgc	cga	gac	agc	ccc	acg	acg	tgt	ggc	ccg	tgt	cca	ccg	cgc	cac	144
Cys	Arg	Arg	Asp	Ser	Pro	Thr	Thr	Cys	Gly	Pro	Cys	Pro	Pro	Arg	His	
			35				40					45				
tac	acg	cag	ttc	tgg	aac	tac	ctg	gag	cgc	tgc	cgc	tac	tgc	aac	gtc	192
Tyr	Thr	Gln	Phe	Trp	Asn	Tyr	Leu	Glu	Arg	Cys	Arg	Tyr	Cys	Asn	Val	
	50					55					60					
ctc	tgc	ggg	gag	cgt	gag	gag	gag	gca	cgg	gct	tgc	cac	gcc	acc	cac	240
Leu	Cys	Gly	Glu	Arg	Glu	Glu	Glu	Ala	Arg	Ala	Cys	His	Ala	Thr	His	
65					70				75						80	
aac	cgt	gcc	tgc	cgc	tgc	cgc	acc	ggc	ttc	ttc	gcg	cac	gct	ggg	ttc	288
Asn	Arg	Ala	Cys	Arg	Cys	Arg	Thr	Gly	Phe	Phe	Ala	His	Ala	Gly	Phe	
				85					90					95		
tgc	ttg	gag	cac	gca	tcg	tgt	cca	cct	ggt	gcc	ggc	gtg	att	gcc	ccg	336
Cys	Leu	Glu	His	Ala	Ser	Cys	Pro	Pro	Gly	Ala	Gly	Val	Ile	Ala	Pro	
			100					105					110			
ggc	acc	ccc	agc	cag	aac	acg	cag	tgc	cag	ccg	tgc	ccc	cca	ggc	acc	384
Gly	Thr	Pro	Ser	Gln	Asn	Thr	Gln	Cys	Gln	Pro	Cys	Pro	Pro	Gly	Thr	
		115					120					125				
ttc	tca	gcc	agc	agc	tcc	agc	tca	gag	cag	tgc	cag	ccc	cac	cgc	aac	432
Phe	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Glu	Gln	Cys	Gln	Pro	His	Arg	Asn	
	130					135					140					
tgc	acg	gcc	ctg	ggc	ctg	gcc	ctc	aat	gtg	cca	ggc	tct	tcc	tcc	cat	480
Cys	Thr	Ala	Leu	Gly	Leu	Ala	Leu	Asn	Val	Pro	Gly	Ser	Ser	Ser	His	
145					150					155					160	
gac	acc	ctg	tgc	acc	agc	tgc	act	ggc	ttc	ccc	ctc	agc	acc	agg	gta	528
Asp	Thr	Leu	Cys	Thr	Ser	Cys	Thr	Gly	Phe	Pro	Leu	Ser	Thr	Arg	Val	
				165					170					175		
cca	gga	gct	gag	gag	tgt	gag	cgt	gcc	gtc	atc	gac	ttt	gtg	gct	ttc	576
Pro	Gly	Ala	Glu	Glu	Cys	Glu	Arg	Ala	Val	Ile	Asp	Phe	Val	Ala	Phe	
				180				185					190			
cag	gac	atc	tcc	atc	aag	agg	ctg	cag	cgg	ctg	ctg	cag	gcc	ctc	gag	624
Gln	Asp	Ile	Ser	Ile	Lys	Arg	Leu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu	
		195					200					205				
gcc	ccg	gag	ggc	tgg	gct	ccg	aca	cca	agg	gcg	ggc	cgc	gcg	gcc	ttg	672
Ala	Pro	Glu	Gly	Trp	Ala	Pro	Thr	Pro	Arg	Ala	Gly	Arg	Ala	Ala	Leu	
	210					215					220					
cag	ctg	aag	ctg	cgt	cgg	cgg	ctc	acg	gag	ctc	ctg	ggg	gcg	cag	gac	720
Gln	Leu	Lys	Leu	Arg	Arg	Arg	Leu	Thr	Glu	Leu	Leu	Gly	Ala	Gln	Asp	
225					230					235					240	

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